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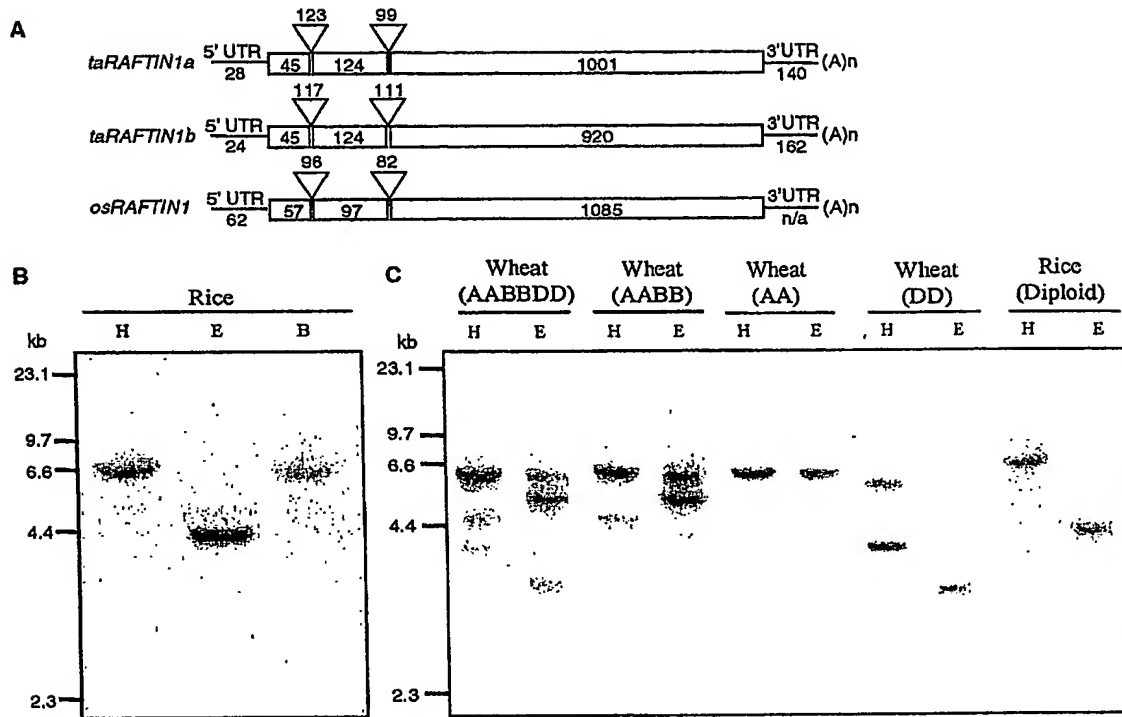
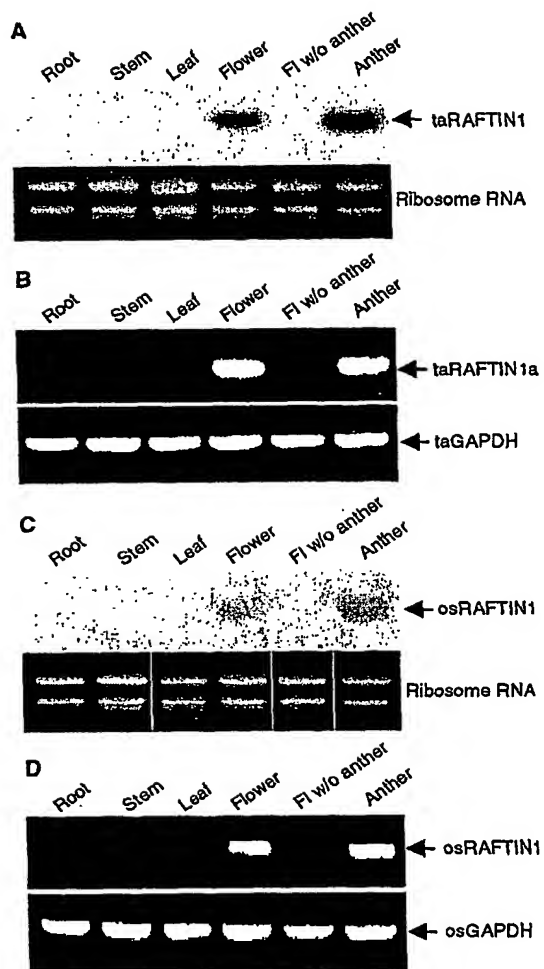


Figure 1

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Figure 2 Aiming Wang *et al.* 2002Top  
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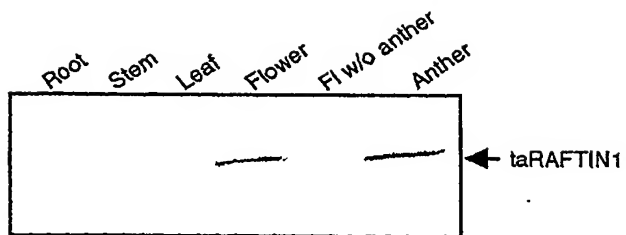
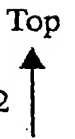


Figure 3 Aiming Wang *et al.* 2002



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**A**

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taRAFTIN1a 1  MARFLVALLATTLLVAVOAGGQLGHAAPATAEVEFWRVLPSPPLDAVLRLLLKQPAAGVELLTEATSFVRDAEDRAAPFD 78
taRAFTIN1b 1  -----G-----S-----P-----AA----- 72
osRAFTIN1 1  -----AA--LVAVA-AA-VLS--D--S-----F-----RPDTSF-VGKA--ACAAAAGAARTGF-- 74

taRAFTIN1a 79  YRDSRSPPDDEPSKSTGAAAASGARDPDYDDYSAAAAGGDKLRGAASGARAAAAADFDYDDYSGADKLRGATDAAAA 141
taRAFTIN1b 73  -----SS-----V-AA--AAAAAAAAAAAAAAAA--N-----ER-----AAAA 114
osRAFTIN1 75  -T--RG-DSPTTA-GLDL-GDFGEFAP-G-A--AQGE--GGGAA--A-EQVLAVDAG-N--K-V--R-L--GSSTAGGE 153

taRAFTIN1a 142  AAAAAAAEYKAPSSSLAGNGASMARGAGKAETTTVFHEEAVRVGKRLPFRFPPTPAALGFLPRQVADSVPTTAALP 212
taRAFTIN1b 115  AAAAAAAA--S--Y--A-----R--H----- 185
osRAFTIN1 154  NDDEPFGYD-----GSGTAASTT--V-TGA-----E--Y--A--TS--R--I--A-- 233

taRAFTIN1a 213  GVLATFGVADSATVASMEATLRACESPTIAGESKFCATSLEALVERAMEVLGTRDIRPVTSTLPRAGAPLQTYTVRSVR292
taRAFTIN1b 186  I-----I-----T--P-----G-----VA-Q 265
osRAFTIN1 234  A--L-----P-T-EA-G-RE--T--W--L-----G--AA-----AALA-----G--A-A--A-L 313

taRAFTIN1a 293  PVEGGPVFVACHDEAYPYTVYRCHTTPGSRAYMVMEGAAAARGGDAVTIATVCHTDTSLWNPEHVSFKLLGTPGGTTPV 369
taRAFTIN1b 266  -----T--AAA--A--A----- 342
osRAFTIN1 314  ---AG--Q-----A-----E--DGGGD--E--V-----N--R-----S-- 392

taRAFTIN1a 370  CHLMPYGHIIWAKNVNRSPA 389
taRAFTIN1b 343  -----K----- 362
osRAFTIN1 393  -----V-----KS-T- 412

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**B**

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taRAFTIN1a 169  FFHEEAVRVGKRLPFRFPPTAAALGFLPRQVADSVPTTAALPGVLATFGVASDSATVASMEATLRACESPTIAGES 246
PG-bet 415  --R-KMLKS-TIMPM--DIKDKMPKRS--VI-SKL--S-SKIAELKAFHAGDE-QVEKMIGDA-SE--RAPS--T 492
RD22 176  --L-KDLVR--EMNV--NAEDGYGGKTA--GE-ET--GSEKFSET-KR-S-EAG-EEAEM-KK-IEE--ARKVSG-E 255
ASG-1 87  --N-HD-LE--TE-MY--SVTA--K--Q-R-VQEI--S-R-ADI--L-HIPPG-SEAADVAT--GL-DAAAGDGV 164
CFC1 124  --L-KDMHP-ATMSLH-TEN-AAA--KSA--Y-T-QKI--SSDK--EIFNK-S-KPG-LK-EM-KN-IKE--Q-A-E--E 200
SCB1 92  --L--DL-A--IFNMK-VNN--AA-TVPL--ISKQI--SEDKKQ--ML--EAN-SNAKIAE--GL-QE-ATEG-R 169

taRAFTIN1a 247  KFCATSLEALVERAMEVLGTRDIRPVTSTLPRAGAPLQTYTAAARSVRPVEGGPVFVACHDEAYPYTVYRCHTTPGSRAY 324
PG-bet 493  -R-VN-A-DMIDFATS--RNVAA--RT-EDTKGSNGNIMIGSVKINGGKVTKSA--S--QTL--LL-Y--SVPKV-V- 569
RD22 256  -Y-----SM-DFSYSK--KIHV-A-STEVAKON--M-K-KIAAAG-KCLSDDKA--V--KQK--FA-FY--KAMMTTV- 334
ASG-1 165  RA-V--PDDM-G--AA--SNMQVLAPS--TG-MS--P--AA-A-K--D-SDA--G--P-L--S--SVQTGT- 241
CFC1 201  -Y-----SMIDYSISK--KV-AQA-STEVEKQATEM-K--IAAAG-QKMTDDKAA--V--KQN-A-A-FY--KSETT-- 276
SCB1 170  -H-----SM-DFVYSA--KAVGAFSTEKERETESAGKEV-VKNG--KLGDDHVAIA--PMS--V-FG--LVPR-SG- 246

taRAFTIN1a 325  MVMDEGARGAGDAVTIATVCHTDTSLWNPEHVSFKLLGTPGGTTPVCHLMPYGHIIW 380
PG-bet 570  EA-ILDPNSKVKINHGVAI--V--S-G-S-GA-VA--SG--KIE--WIFENDMTW 626
RD22 335  A-PL--AAEN-MRAKAVA--KN--A--N-LA--V-KV--TV--FL-ET-VV- 389
ASG-1 242  VME-QSSY-N-G-LKLVA--RN-TS-D--V-AS--L-I--FV--V-F 298
CFC1 277  --PL--AAAD-TKAKAVA--A--K-LA-QV-KVE--TI--FL-RD--V- 331
SCB1 247  L-RLK-AAED-VR-KAVVA--R--K-DHN-GA--V-NL--NGT--VFTE-NLL- 301

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Figure 4 Aiming Wang *et al.* 2002

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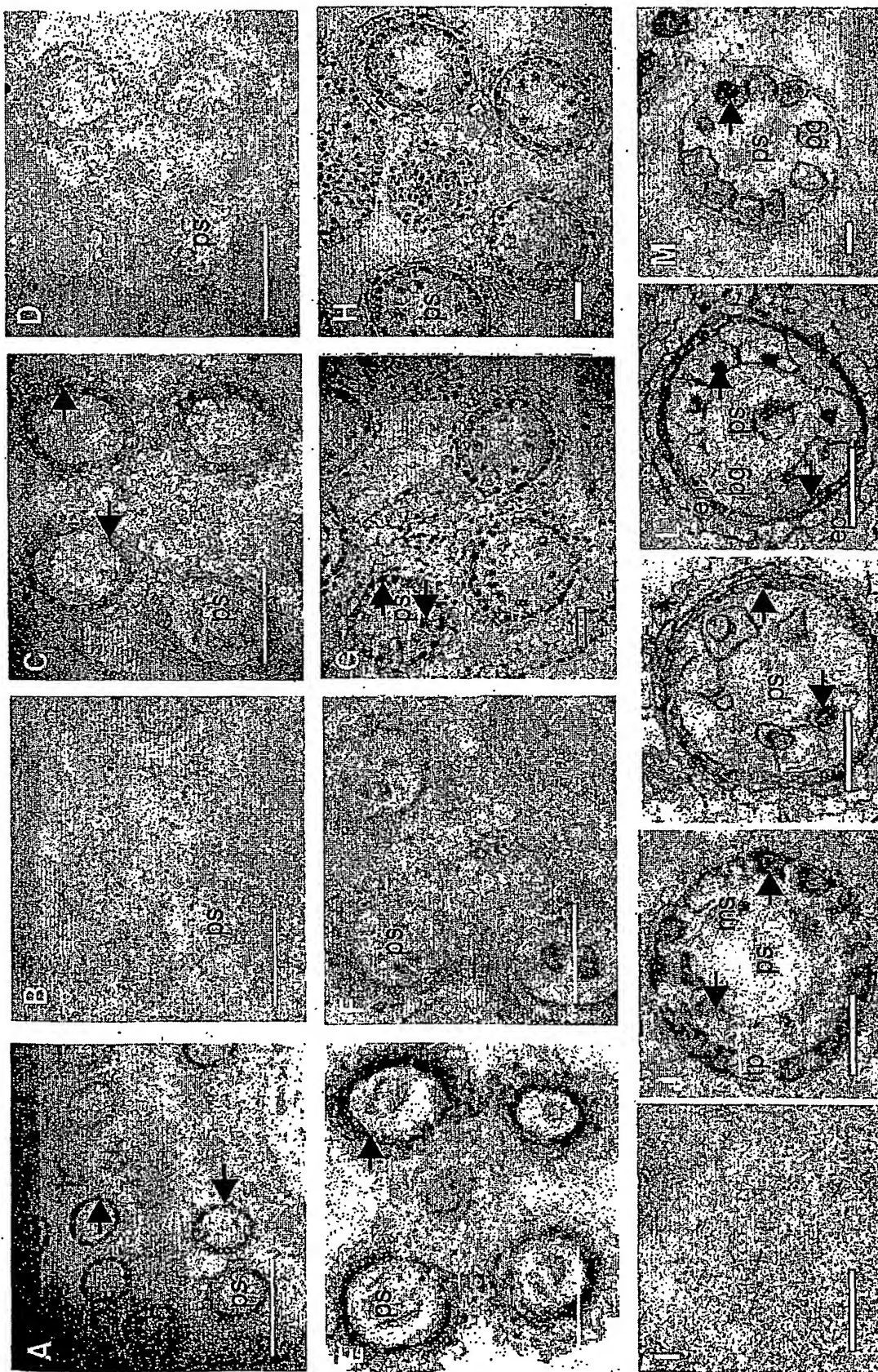


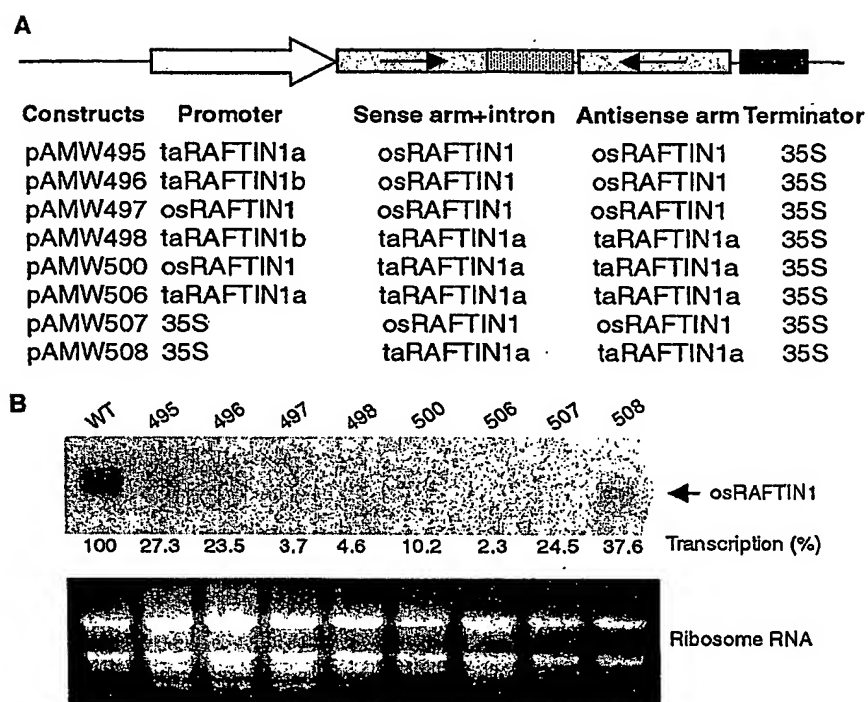
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Figure 6

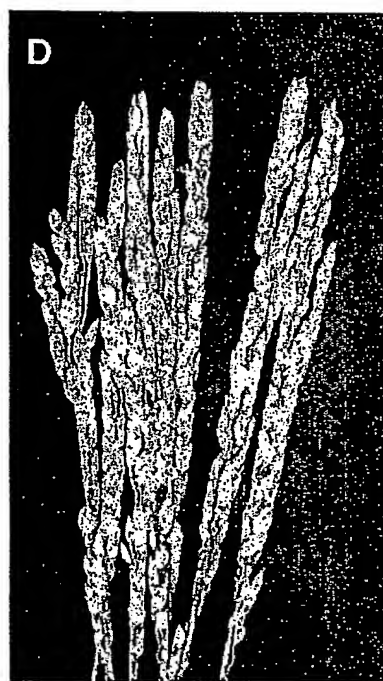
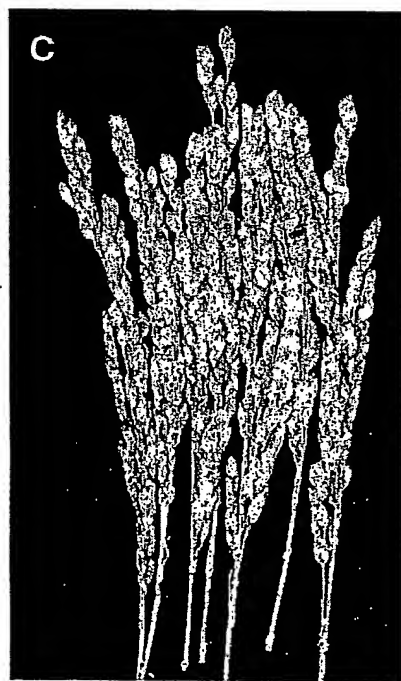
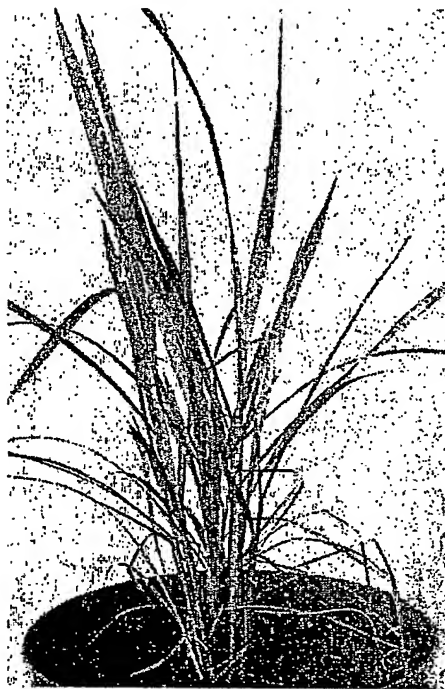
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Figure 7 Aiming Wang *et al.* 2002

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Figure 8ABCD Aiming Wang *et al.* 2002



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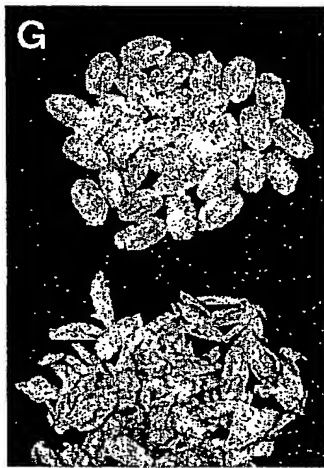
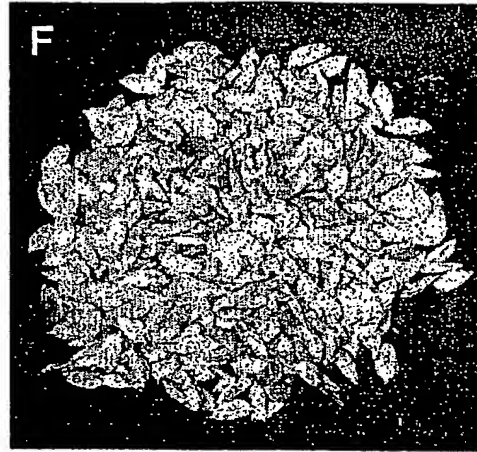
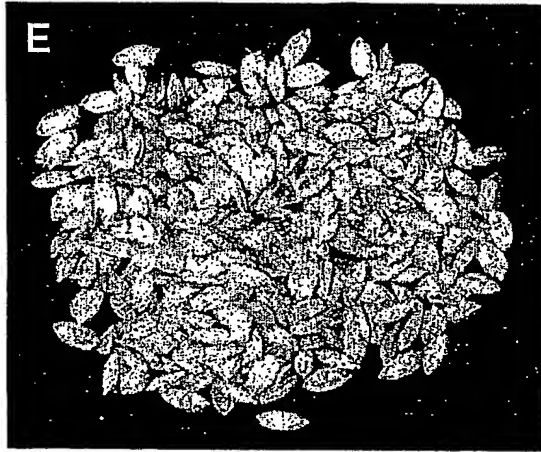


Figure 8EFGH Aiming Wang *et al.* 2002

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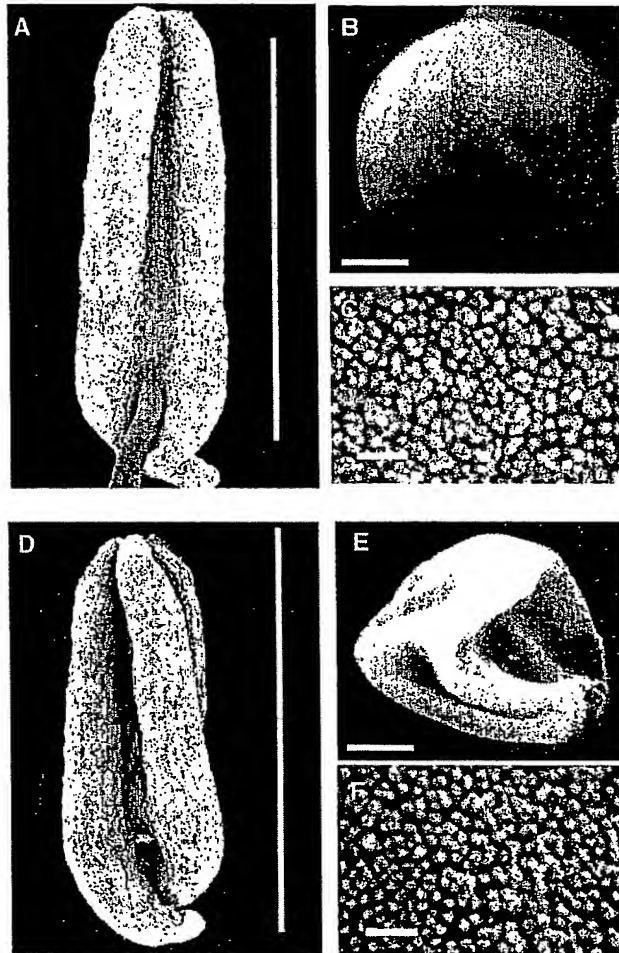
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Figure 8I Aiming Wang *et al.* 2002

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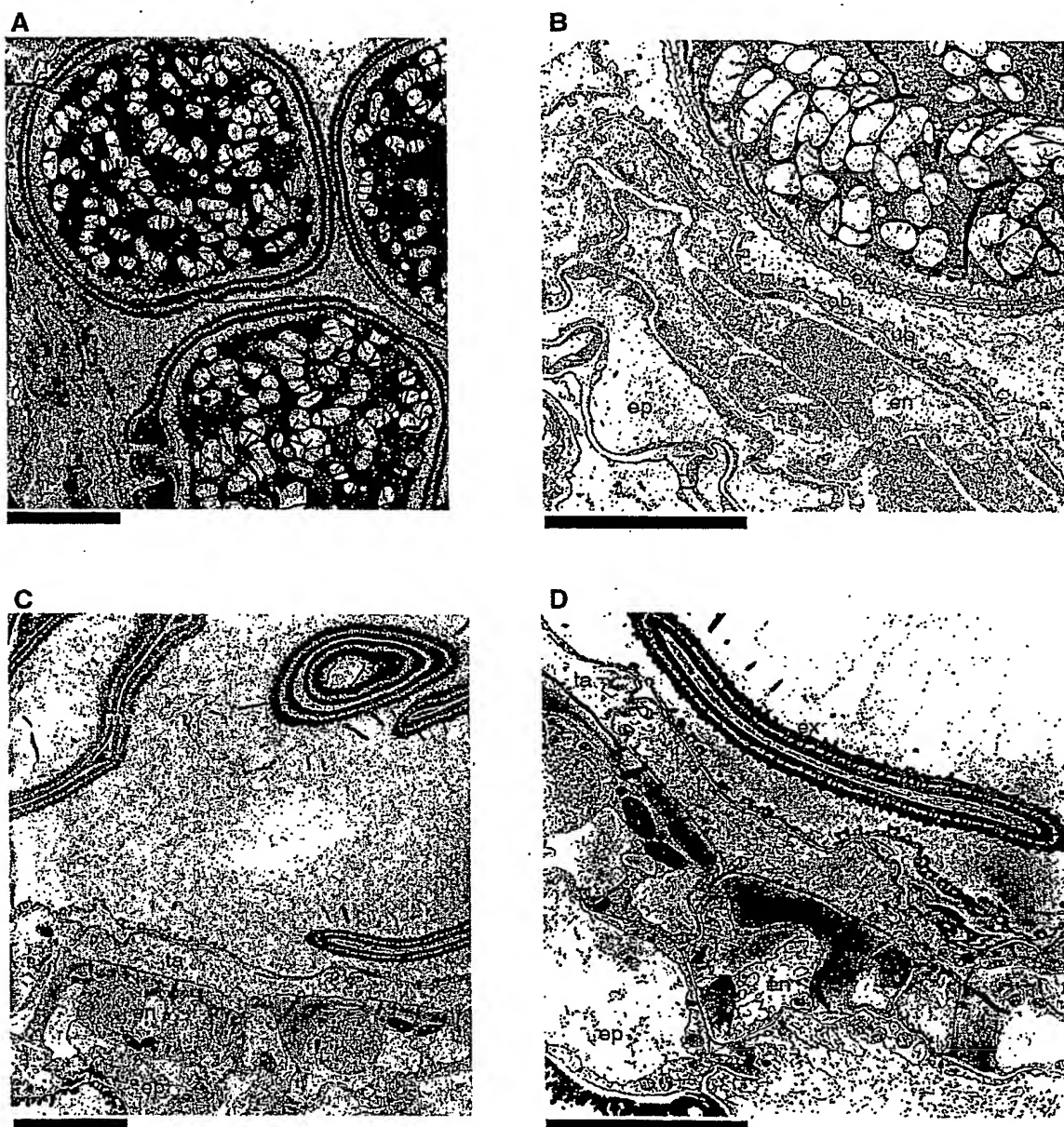


Figure 10

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Fig. 11. *taRAFTIN1a* cDNA sequence (1338 nt excluding the polyA tail, ORF from nt 29 to nt 1198). Start codon and stop codon are underlined.

CTCTGGACCTCTCACCTAGCGCACATCCATGGCGCGCTTCCTCGTCGCCCTCCTCGCCACCAC  
CCTGGTCGCGGTTCAAGGCTGGAGGGCAGCTGGGCCACGCGGCGCCGGCGACGGCGGAGGTGTT  
CTGGCGCGCCGTGCTGCCACACTCGCCATTGCCCGACGCCGTTCTCCGCCTTCTCAAACAACC  
CGCAGCAGGTGTTGAACTGCTCACAGAAGCCACCAGCTTCGTGAGGGATGCCGAGGACAGGGCC  
CCCCTTCGACTACCGTGATTACAGCCGCTCGCCGCCCGATGATGAACCGAGCAAGAGCACCGG  
CGCCGCTCCGGGGCGCGGGACTTCGACTACGACGACTACAGCGGGGGCGACAAGCTCCGTGG  
CGCCGCTCCGGGGCGCGGGACTTCGACTACGACGACTACAGCGGGGCCGACAAGCTCCGTGG  
CGCCACCGATGAATACAAGGCGCCGAGCAGCAGCCTCGCTGGAAACGGGGCGTCCATGGCTAG  
GGGCGGCAAGGCGGAGACGACGACGGTGTCTTTACGAGGAGGCGGTGCGCGTCCGCAAGAG  
GCTCCCATTTCCGCTTCCCGCCGGCGACTCCCGCCGCGCTCGGTTTCTGCGCGCCAGGTCCG  
CGACTCCGTCCCGTTACGACGGCCGCGCTGCCTGGCGTCTCGCGACGTTCCGGCGTCGCGTC  
CGACTCCGCCACGGTGGCCAGCATGGAGGCGACGCTGCGCGCCTGCGAGTCGCCGACCATCGC  
CGGGGAGTCCAAGTTCTGCGCGACCTCGCTGGAGGCCCTGGTGGAGCGCGCCATGGAAGTGCT  
GGGGACCGCGACATCAGGCCGGTGACGTCGACGCTGCCCCGCGCCGGCGCCCCGCTGCAGAC  
GTACACCGTCCGCTCCGTGCGGCCGGTGGAGGGGGGCCCTGTCTTCGTGGCGTGCCACGACGA  
GGCCTACCCGTACACCGTGTACCGGTGCCACACCACTGGCCCGTCCAGGGCGTACATGGTGGA  
CATGGAGGGCGCGCGCGGGCGGCGACGCGGTGACCATCGCCACCGTGTGCCACACCGACACGTC  
CCTGTGGAACCCGGAGCACGTCTCCTTCAAGCTCCTGGGCACCAAGCCTGGCGGCACGCCGGT  
CTGCCACCTCATGCCGTACGGGCACATAATCTGGGCCAAGAACGTGAATCGCTCGCCGGCGTG  
AGCGGCCCCGGGCAGCTCTGTGGTCTCGCCGGAACTAAGATCGATGTACTACTACTATCTG  
TTTCCACCTACGTCTTCTGTTGTTTCAGACCACCAGATGGTCACCAGAGCAGCGCTTGTAATAA  
AAGAACAGCTTCTGCAAAAAAAAAAAAAAAAAA

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**Fig. 12.** *taRAFTIN1a* genomic sequence (1560 bps including two introns). Introns are shown in lower case letters. Start codon and stop codon are underlined.

CTCTGGACCTCTCACCTAGCGCACATCCATGGCGCGCTTCCTCGTCGCCCTCCTCGCCACCAC  
CCTGGTCGCGgtaatggccgaagaagccactgagcaacgcctgcatcttcttcatttcggcaa  
actgcacctagtgcatttcgcatgagattgatcgatcacaaactggtgctaacggcctgtttc  
gtcacagGTTCAGGCTGGAGGGCAGCTGGGGCCACGCGGCGCCGGCGACGGCGGAGGTGTTCTG  
GCGCGCCGTGCTGCCACACTCGCCATTGCCCGACGCCGTTCTCCGCCTTCTCAAACAACCCGC  
AGCAGgtctgtctttcatgttcccttcctcgctcgccctecgttaactgtcttcttctctcgag  
tttgattgaccgccaacacaaaaaatgcatgcacgcacagGTGTTGAACTGCTCACAGAAGC  
CACCAGCTTCGTGAGGGATGCCGAGGACAGGCCCCCTTCGACTACCGTGATTACAGCCGCTC  
GCCGCCCGATGATGAACCGAGCAAGAGCACCGGCGCCGCCTCCGGGGCGCGGGACTTCGACTA  
CGACGACTACAGCGGGGGCGACAAGCTCCGTGGCGCCACCGATGAATACAAGGCGCCGAGCAG  
CAGCCTCGCTGGAAACGGGGCGTCCATGGCTAGGGGCGGCAAGGCGGAGACGACGACGGTGTT  
CTTTCACGAGGAGGCGGTGCGCGTCGGCAAGAGGCTCCCATTCCGCTTCCCGCCGGCGACTCC  
CGCCGCGCTCGGTTTCTTGCCGCGCCAGGTGCGCGACTCCGTCCCGTTCACGACGGCCGCGCT  
GCCTGGCGTCTTCGCGACGTTGCGCGTCGCGTCCGACTCCGCCACGGTGGCCAGCATGGAGGC  
GACGCTGCGCGCCTGCGAGTCGCCGACCATCGCCGGGGAGTCCAAGTTCTGCGCGACCTCGCT  
GGAGGCCCTGGTGGAGCGCGCCATGGAAGTGCTGGGGACCCGCGACATCAGGCCGGTGACGTC  
GACGCTGCCCGCGCCGGCGCCCGCTGCAGACGTACACCGTCCGCTCCGTGCGGCCGGTGGA  
GGGGGGGCTGTCTTCGTGGCGTGCCACGACGAGGCCTACCCGTACACCGTGTACCGGTGCCA  
CACCCTGGCCCCGTCCAGGGCGTACATGGTGGACATGGAGGGCGCGCGCGGGCGGCGACGCGGT  
GACCATCGCCACCGTGTGCCACACCGACACGTCCCTGTGGAACCCGGAGCACGTCTCCTTCAA  
GCTCCTGGGCACCAAGCCTGGCGGCACGCCGGTCTGCCACCTCATGCCGTACGGGCACATAAT  
CTGGGCCAAGAACGTGAATCGCTCGCCGGCGTGAGCGGCCCGGGCAGCTCTGTGGTCTCGCCG  
GAACTAAGATCGATGTACTACTACTATCTGTTTCCACCTACGTCTTCTGTTGTTTCAGACC  
ACCAGATGGTCACCAGAGCAGCGCTTGTAATAAAAGAACAGCTTCTGC

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**Fig.13.** *taRAFTIN1a* promoter sequence (1719 bps).

CTGTGCGATGGCGCTCTGTCCTTGTGATTCTTTCTTAGGGAACTCGTCTCTGGGGCCTCCGAGG  
CCTGCAACCCTGTATCAGGACAATTCTGACTGGCCTCCAGGAGTCCTAACAGCCACCGACCTG  
GTCCACTGGGCCCATCTAGAGTATCTTGAAGTGTCGTTTGACAAATCCCGCTAATTAAGGGA  
TGTGATGATGATGGTTTCTGAATCCGCGCGCCTTACCTCGCAAAACGGGGAATTGCAAAGGAT  
ATATGGCACCTGTCGCGTCGTGAGGCCAGACGCTTCGGTTTCAAGCTGGTTATAGGGAGGGGG  
AAACGAAGGGTTTTTTCTCCCTCTGTCTTCATCCATTTTCGTCTCCCAGCCCTCAGCTCCCAA  
AAGCGTGTCGCCACCTCAAAGTCTTCAGCGCTTGCTCACGTAGCCCCCGTCCACCCCTTCCTT  
GCCACCAAGATGGCCCGAACCAAGAGCGAGAAGGTTCCCTAAGGTTCCCAGCTAGGATCTGCC  
GCCGCTGGAACGGGGCTGAAGCGGAAGAGGGTGCCTCCAAGGGTGGTATGAAACAACAGCCG  
GAAGCCCCCAAGACTACAGGAAAGTGGTTCCTTCCTCGGCCACCGACAAAAAATTCAGGGT  
CTCGTGGAGATAGGGCTGATGCCAGCGGATTTGGAGTGCCGCCTCCCGGGGGACGAGGCTCCG  
CCAACCTCCTCGCGACGGTGAGCACATCCTCTGCCTGGAGTATATATTTTCGGGAGGGGGCTCGGG  
TTTCCCTACACGACTTCGTTTGCGGGATCTTGCGCTTCTACGGCTGCTAGCTACACCACATC  
CCGTCAAACGGGGTTCTTTACATTGCAAACCTTCATCACATTTTGCGAGTGCTTTCTCGGGACT  
GCCGCTCACTTTAAGTTGTTCCAATACTTCAATCAGGACTGCGTTCAGACCAACGGGGACATC  
GTCTACGACCCCGCAACACCAAATTCCTCGCCACATACCTCCGGAAAATAATCCTATACAACC  
TGGTCTCACGCTTCATCTCGTAAGATTTGCCATGTGTACTTCACCAATCTTGATGCATCCCTT  
TTTCCCAAGATTTATATGCCTGATCTGTATTTTGTCTCCGCTGTTTCGAGATTTGATGTTTA  
ATTGATGAAGCCCAAGCAATCCGGCATGCCCGTCGGTGCACTAGATGGCTAGCTTTTCTACGG  
TGCTGGGCCTGCCGCGAGGGGCGCGAGGCCACGTAGGAGACTGTTAGGATTCATGGGGCTGG  
ACGCTGGTGGCGTGAAGTTCGGGAAGGAGGATTGAGGAAGAAGGATGCATCAAGATTGGTGAA  
GAACACGTGGCATCCTCTAGAGTAGGTCTTACGAGATGAAGCCTGAGACCAGGTCGTATGGGA  
TTATTTTCCCGACCTCCCGAAGCCCCGCAAAGTTAACTGCAGCTGCGTGGACGGCGAGCACC  
GCACCGCACACGAACGCGAACCTGACGCTGCCGCGCCACACAACACGCCATTTCGCGCGCGGAT  
CGTCGGATGTCACGCCCAGGATTATATTCTCCGGTGCCGCACGTACCATGCGATCGCACAGCT  
CACGTCGAGAGCTTTTCTGTTTGGCGTCGCCGTCAATGAAACACCTTCCCGTCGAGCCGACGA  
CGCCTATAAGTACCTCGTCTGATCGCATCATCACTCCCAAGTACTACAACCTCTGGACCTCTC  
ACCTAGCGCACATCCATG

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**Fig.14.** *taRAFTIN1b* cDNA sequence (1275 bps excluding the polyA tail, ORF from nt 25 to nt 1113). Start codon and stop codon are underlined.

CGACCTCTCACCTAGCGCACATCCATGGCGCGCTTCCTCGTCGCCCTCCTCGCTGCCACCCTG  
GTCGCGGTTTCAGGCTGGAGGGCAGCTGGGCCACGCGGCGCCGGCTACGGGGGAGGTGTTCTGG  
CGCGCCGTGCTGCCGCACTCGCCATTGCCTGACGCCGTTCTCCGCCCTCCTCAAACAACCTGCA  
GCAGAATCCACCAGCTTCGTGAGAGACCCCGAGGACAGGCCCCCTTCGACTACCGTGATTAC  
AGCCGCTCGTCGTCCGATGATGAACCGAGCAAGAGCACCGTTCGCCGCCTCCGGAGCGGGGGGC  
TTCGACTACGACAACTACAGCGGGGGCCGACGAACGTCGTGGTGCCACCGATGAATACAAGGCG  
CCGAGCAGCAGCCTCGCTGGAAGCGGGGCGTACATGGCTAGGGGCGGCAAGGCGGAGACGACG  
ACGGTGTTCTTTACGAGGAGGCGGTGCGCGTCGGCAGGAGGCTCCCATTCCACTTCCCGCCG  
GCGACTCCCGCCGCTCTCGGTTTCTGCGCGCCAGGTGCGCGACTCCGTCCCGTTCACGACG  
GCCGCGCTGCCCGGCATCCTCGCGACGTTTGGCATCGCGTCCGACTCCACCACGGTGCCCAGC  
ATGGAGGCGACGCTGCGCGCCTGCGAGTCGCCCACCATCGCCGGGGAGTCCAAGTTCTGCGCG  
ACTTCGCTGGAGGCCCTGGTGGAGCGCGCCATGGGAGTGCTGGGGACCCGGGACATCAGGCCG  
GTGACGTCGACGCTGCCCCGCGCCGGCGCCCCGCTGCAGACGTACACCGTCGTGCGCCGTGCAG  
CCGGTGGAGGGGGGGCCTGTCTTCGTGGCGTGCCACGACGAGGCCTACCCGTACACCGTGTAC  
CGGTGCCACACCACCGGCCCGTCCAGGGCGTACACGGTGGACATGGAGGGCGCGCGCGGCCG  
GACGCGGTGACCATCGCCGCCGTGTGCCACACCGACACGTCCCTGTGGAACCCGGAGCACGTC  
TCCTTCAAGCTCCTCGGCACCAAGCCCGGCGGCACGCCGGTCTGCCACCTCATGCCGTACGGG  
CACATAATCTGGGCCAAGAACGTGAAGCGCTCGCCGGCGTGAGCGGCCTTGACGCTCTGTGGT  
GTCGCCGGAATAAGATCGATGTACTACTATCTGTTCTTACCTACGTCTTCTTGTGTTTC  
ATACCACCAGATGGTCACCCAAGAGCAAGCGTTCGTAATAAAAAGAACAGCTTTTTCAGAAAG  
CTGGTGTTTTATTTTAAAAA



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**Fig.15.** *taRAFTIN1b* genomic sequence (1503 bps including two introns). Introns are shown in lower case letters. Start codon and stop codon are underlined.

CGACCTCTCACCTAGCGCACATCCATGGCGCGCTTCCTCGTCGCCCTCCTCGCTGCCACCCTG  
GTCGCGgtaatggccgaagaagagcaacgcctgcatcttcttcattttggcaaatgacaccta  
gtacatthttgcatgagattaatcaatcacaaactggtgctaacggcctgtttcgtcccag  
G TTCAGGCTGGAGGGCAGCTGGGCCACGCGCGCCGGCTACGGGGGAGGTGTTCTGGCGCGCC  
GTGCTGCCGCACTCGCCATTGCCTGACGCCGTTCTCCGCCCTCCTCAAACAACCTGCAGCAGgt  
ctgtcttgcatcttctcctcgtcgccctccgttaactgtcttcttctctcgagtttgattgatca  
ccaaacacaaaaatgcatgcacgcgtgggtgttgaaactgcgcacagAATCCACCAGCTTCGTG  
AGAGACCCCGAGGACAGGCCCCCTTCGACTACCGTGATTACAGCCGCTCGTCGTCCGATGAT  
GAACCGAGCAAGAGCACCGTCGCCGCCCTCCGGAGCGGGGGGCTTCGACTACGACAACTACAGC  
GGGGCCGACGAACGTCGTGGTGCCACCGATGAATACAAGGCGCCGAGCAGCAGCCTCGCTGGA  
AGCGGGGCGTACATGGCTAGGGGCGGCAAGGCGGAGACGACGACGGTGTTCTTTACGAGGAG  
GCGGTGCGCGTCGGCAGGAGGCTCCCATTTCCACTTCCCGCCGCGACTCCCGCCGCTCTCGGT  
TTCCTGCCGCGCCAGGTGCGCGACTCCGTCCCGTTACGACGGCCGCGCTGCCCGGCATCCTC  
GCGACGTTTGGCATCGCGTCCGACTCCACCACGGTGCCAGCATGGAGGCGACGCTGCGCGCC  
TGCGAGTCGCCACCATCGCCGGGGAGTCCAAGTTCTGCGCGACTTCGCTGGAGGCCCTGGTG  
GAGCGCGCCATGGGAGTGCTGGGGACCCGGGACATCAGGCCGGTGACGTGACGCTGCCCCGC  
GCCGGCGCCCCGCTGCAGACGTACACCGTCGTGCGCGTGACGCCGGTGGAGGGGGGGCCTGTC  
TTCGTGGCGTGCCACGACGAGGCCTACCCGTACACCGTGTACCGGTGCCACACCACCGGCCCG  
TCCAGGGCGTACACGGTGGACATGGAGGGCGCGCGCGCGCGGACGCGGTGACCATCGCCGCC  
GTGTGCCACACCGACACGTCCCTGTGGAACCCGGAGCACGTCTCCTTCAAGCTCCTCGGCACC  
AAGCCCGGCGGCACGCCGGTCTGCCACCTCATGCCGTACGGGCACATAATCTGGGCCAAGAAC  
GTGAAGCGCTCGCCGGCGTGAGCGGCCTTGACGCTCTGTGGTGTGCGCCGGAATAAGATCGAT  
GTACTACTACTATCTGTTCTTACCTACGTCTTCTTGTGTTTCATACCACCAGATGGTCACCCA  
AGAGCAAGCGTTCGTAATAAAAAGAACAGCTTTTTGCAGAAGCTGGTGTTTTATTTT

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Fig. 16. *taRAFTIN1b* promoter sequence (2095 bps).

TTGTTGAGTGCCACACTATATTCACCTACACCATATGCACATTATGCTTGGATTGTCTTGTACT  
TGACTCATGTGTTTAGACACTTCATTTTATTTGGTGTGTGAATGACTCCTATGCTTACCATA  
GACCTTTTCATTGAGCGCTTTGTGCATGTTTGTATACCTTGAGGTAGATGTTTGTCTCTTGT  
CAAATATATAGCATCTCTACCTCCCATTTCATGCTTGTTCATGATGTCCTTGATTGTGCT  
CAATTCATATGCTTCTGTGACATGCCACAATCCTTTGTACACCATATGCTAGGCTTGATGAT  
GACACTTGTGTTGGGTGACTCACCTTTTGAATGATTGGTTTTCATTAAACGCTAACCACATTTAT  
TTTTCCAAGTGTTTGTTCCTTGCTCCTTTTGAAGGAACCACATGACGGTTCGACATTGGAG  
AGTGCCTATTTTCGAGCTTCAAGATGATGAGTGTGCTTGGTGATCGTCCACTTCTACATGGTGACG  
CCGTCTCTTTCCCATGGTGATTGGTTTTTGATCCGAGGTCCGATCTTTCCCAAGTGGGAGGG  
GATGATGCGGAGCATACTACGGACATCACCATGTCTAGAGTTCATTTCAGCAAGTGACACCTAT  
CACATCTACTTCACATACATAAAGGTGAATCATCTCCTTTACACGTGCTCACTTGATCCCTTC  
GAGGATGGTATACTACTTGACACTTCTCACGTGTGCATGCATAGGCATTGTTCGGAGCACCATG  
AACGATGAGGAGGAGTGCGAGCACAAGTGTACAACCTACACCATCCGCGAGGGAAGCATGGAAG  
AGAAGGAAGAAGAAGCATGGACAAGCTTCTGGAAAGCCCGGAACCTTCTGGCCTCCTGCCCGGA  
ACTTCCGGTCATCCGAAACTTCTGCCCCGACACACCGAAGCCGTCTGAGAGCGTGCCAAATC  
TCTGGATAGCCCCGACCTTCGACCGGAACCTCCGGCGCCTGGACCTTCCGGCCATCCCTGGAA  
CTCCCGCCTGCCTGCACGCAGAGACTCGGGCCGAAGCGCATGTACCCTTTCGCCCTCACTT  
ATCCCTTCGTGGCTATCACTATATATACTCATCCTCCTCCTCCATTCTAGGGTTAGCATTTTG  
ATAGCTCATTTGCATGTGAGATTTGCTCCTTACCCCCATCTCCTCTTGAGAGAGTGAGATTGA  
TGCACTCCATTGGAGTCCAAGGTCTCCTTTGGAGAAGATCCCATAGGGGAATCAAGACCCCAT  
CATGGGAAGATCCTTCTAGGATTCAAGACCTCAACTCCTTTAAGGATTGGGATGAACTAGTTA  
CCTCTTGTATCTTCTTGTGTTGGATTTAAACCTTTGTATCCCTCTATGTGTATGTGGATTTAG  
CATATGTGTGATTGGATCTTGTCTATTGGAGTGTTCCTCTCTTTTGTTCCTTGTGTTCAT  
CGTTTTCTTCGGGAGATCCCCTCCATTTCTGTAAAGATCGGTCCCTAGGGTTCTACCCTACAT  
TAGCTCAGGTTTCCCCTACACATCTTCGTTTGTGAGCTGTTGCGCTTCTACGGCTGGGAGCTA  
CAGCACATCTCATTCCCACCAAACGGGGTTCTTCACATTGTAAACTTCATCGTATTTTGCGAA  
TGCTTTCTGGGGACAGCCACTCACTTTGAGTTGTTCCGATACTTCTTCCGGGTCTGCGTTTCAG  
ACCAACGGGGACACCGTCTGCAACCTTGGAGGAGCCATTCTTCCGACACACCAAAATTTTCGC  
CACGGACCCCCCGAAGATCCGCAAGAAAAAAGCTGCAACGGCGTGGACGGCGAGCACCGC  
ACCGCACACGAACGCGAACGCGACGCTGCCGCGCCACACAACACGCCATTGCGCGCGGATCG  
TCGGATGTCACGCCACGATAATATTCTCCGGTGCCGACGTACCATGCGATCGCACAGCTCA  
CATCGAGAGCTTTTCTGTTTGGTGTGCGCGTCAATGAAACACCTTCCCGTCAAGCCGACGACG  
CCTATAAGTACCTCGCCTGATCGCATTATCACTCCCAAGTACTACAACCTCTCGACCTCTCAC  
CTAGCGCACATCCATG

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Fig. 17. *taRAFTIN1d* predicted cDNA sequence (246 bps).

ATGGCGCGCTTCCTCGTCGCCCTCCTCGCTGCCACCCTGGTCGCGGTTTCAGGCTGGAGGGCAG  
CTGGGCCACGCAGCGCCGGCGACGGCGGAGGTGTTCTGGCGCGCCGTGCTGCCGCACTCGCCA  
TTGCCCCGACGCCGTTCTCCGCCTCCTCAAACAACCTGCAGCAGGTGTTGAACTGCACACAGAA  
GCCACCAGCTTCGTAAGAGACCCCGAGGACAGGCCCCCCTTCGACTACCGTGATTAC

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**Fig. 18.** *taRAFTIN1d* partial genomic sequence (441 bps). Introns are shown in lower case letters.

ATGGCGCGCTTCCTCGTCGCCCTCCTCGCTGCCACCCTGGTCGCGgtaatggccgaagaagcc  
actgagcaacgcctgcatcttctttattttggcaaactggtgctaacggccaatactgccgct  
tgcgttacgtctcagGTTCAAGCTGGAGGGCAGCTGGGCCACGCAGCGCCGGCGACGGCGGAG  
GTGTTCTGGCGCGCCGTGCTGCCGCACTCGCCATTGCCCGACGCCGTTCTCCGCCTCCTCAAA  
CAACCTGCAGCAGgtctgtcttgcatgttcctcgtcgccctccgttaactgtcttcttctctc  
gagtttgattgatcaccaaacacaaaaatgcatgcacgcgtacgcgtagGTGTTGAACTGCAC  
ACAGAAGCCACCAGCTTCGTAAGAGACCCCGAGGACAGGCCCCCCTTCGACTACCGTGATTAC

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**Fig. 19.** *osRAFTIN1* cDNA (1301 bps, ORF from nt 63 to nt1301). Start and stop codons are underlined.

GTCGCAGTCGTCTCCGGCGAGAAATCGGCTGCGCCCCGTCTCTCTCTCTCTCGAACGCTTCCA  
TGGCGCGCTTCCTCCTCCTCCTCGTCGCCGCTGCCGCGCCGCTGCTTTCGCTGGGCG  
ACGCGGCGCCGTCGACGGCCGAGGTGTTCTGGCGCGCCGTGCTGCCGGAATCCCCGTTGCCGG  
ACGCCTTCCTCCGCCTCCTCCGCCCTGACACCAGCTTCGTCTGTCGGCAAAGCGGAGGCGGCCG  
GTGGCGCGGCGCGGACCGGATTCCCCTTCGATTACACTGACTACAGGGGATCTGATTCTCCGA  
CGACGGCGAGTGGTTTGGACCTCGCCGGTGACTTCGGCGAGCCGGCGCCTTTTCGGCTACGACT  
ACAGTGCACAGGGCGAAGGCGGCGGCGGCGGCCGCCGCCGCCGCCGGGAGAGCAGGTTCTTG  
CCGTTCGACGCGGGCTTCAACTACGACAAATACGTCCGCGCGAGGAAGCTCCGCGGCGGCAGCA  
GCACCGCCGGCGGAGAGAATGATGACGAGCCTTTCGGGTACGACTACAAGGCGCCGAGCAGCG  
GCAGCGGCACCGCGGCGTTCGACGACGGCGCGAGGCGTCGGCACGGGCGCCACGACGACGGTGT  
TCTTCCACGAGGAGGCGGTGCGCGTCCGCGAGAGGCTCCCGTTCTACTTCCCGGCGGCGACGA  
CGTCGGCGCTGGGCTTCCTGCCGCGCCGCGTCCGCGGACTCCATCCCGTTACGGCGGCGCGCG  
TGCCGGCCGTCCTCGCGCTGTTTCGGCGTCCGCGCGGACACCGCCGAGGCGGCGGCGATGAGGG  
AGACGCTGCGCACGTGCGAGTGGCCGACCTTCGCCGGCGAGTCCAAGTTCTGCGCCACGTCCG  
TGGAGGCCCTGGTGGAGGGCGCCATGGCGGCGCTCGGGACACGCGACATCGCCGCGCTGGCGT  
CGACGCTGCCCCGCGGCGGCGCGCCGCTGCAGGCGTACGCCGTCCGCGCCGTGCTCCCCGTCG  
AGGGCGCCGGCTTCGTGGCGTGCCACGACCAGGCGTACCCGTACACCGTGTACCGCTGCCACA  
CCACCGGCCCGGCCAGAGCTTACATGGTGGAGATGGAAGGCGACGGCGGCGGCGATGGCGGCG  
AGGCGGTGACCGTGGCCACCGTGTGCCACACCAACACGTTCGCGGTGGAACCCGGAGCACGTCT  
CGTTCAAGCTCCTCGGCACCAAGCCCGGCGGCTCGCCGGTGTGCCACCTCATGCCGTACGGGC  
ACATCGTCTGGGCAAGAACGTGAAGAGCTCGACGGCGTAG

GTCGCGAGTCGTCTCCGGCGAGAAATCGGCTGCGCCCCGTCTCTCTCTCTCGAACGCTTCCA  
TGGCGCGCTTCTCTCTCTCTCTCGTCGCCGCTGCCCGCTGCCCCGCGCTTTTCGgtacact  
catgatgcgcgtactcagctgagccatgcaccggtgcacccgtataactaacgatcgctcgatc  
gaccgacgatgtgtgttcttcagcagCTGGGCGACGCGGCGCCGTGACGGCCGAGGTGTTCT  
GGCGCGCCGTGCTGCCGGAATCCCCGTTGCCGGACGCCCTTCTCCGCCTCTCCGCCCTGgtc  
ggtgtccttcccttccctccttccgcgcgcgcgcgcgcgcgcattactctcctcgagggtttgatttg  
tttggtggacggttgacACACCAGCTTCGTCTGTCGGCAAAGCGGAGGCGGCCGGTGGCGCGGCG  
CGGACCGGATTCCTCTTCGATTACACTGACTACAGGGGATCTGATTCTCCGACGACGGCGAGT  
GGTTTGGACCTCGCCGGTGACTTCGGCGAGCCGGCGCCCTTCGGCTACGACTACAGTGCACAG  
GGCGAAGGCGGCGGCGGCGGCGGCCGCCGCCGCCGCCGGGAGAGCAGGTTCTTGCCGTGACGCG  
GGCTTCAACTACGACAAATACGTGCGCGCGAGGAAGCTCCGCGGCGGCAGCAGCACCGCCGGC  
GGAGAGAATGATGACGAGCCTTTCGGGTACGACTACAAGGCGCCGAGCAGCGGCAGCGGCACC  
GCGGCGTTCGACGACGGCGCGAGGCGTCCGCTTCTACTTCCC GGCGGCGACGACGTCGCGCGCTG  
GGCTTCTCTGCCGCGCCGCGTTCGCGGACTCCATCCCGTTACGGCGGCGCGCTGCCGGCCGTC  
CTCGCGCTGTTTCGGCGTTCGCGCCGGACACCGCCGAGGCGGCCGGCATGAGGGAGACGCTGCGC  
ACGTGCGAGTGGCCGACCCCTCGCCGGCGAGTCCAAGTTCTGCGCCACGTGCTGGAGGCCCTG  
GTGGAGGGCGCCATGGCGCGCTCGGGACACGCGACATCGCCGCGCTGGCGTTCGACGCTGCCC  
CGCGGCGGCGCCGCTGTCAGGCGTACGCCGTCGCGCCGCTGCTCCCCGTCAGGGCGCCGGC  
TTCGTGGCGTGCACGACACGAGGCGTACCGTACACCGTGTACCGCTGCGCACACACCGGCCCG  
GCCAGAGCTTACATGGTGGAGATGGAAGGCGACGGCGGCGCGATGGCGGCGAGGCGGTGACC  
GTGGCCACCGTGTGCCACACCAACACGTGCGCGTGGAAACCGGAGCACGTCTCGTTCAAGCTC  
CTCGGCACCAAGCCCGGCGGCTCGCCGGTGTGCCACCTCATGCCGTACGGGCACATCGTCTGG  
GCCAAGAACGTGAAGAGCTCGACGGCGTAG

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Fig. 21. *osRAFTIN1* promoter sequence (1461 bps).

CGAAGGCCAACTCTGGTAAGGATTCCCATTTACACGAATCAATTTAATAAGTCTAAAACGAACA  
CTATGTTATGAGAAACACCTCACATCCGTCCATAACCGTGCGCATGACTATTTAAAAAGTTTA  
ACTAAACTCTACAAAAGTTGCACGCTTTACCCACACGTCATGAACGTTTCACATTACCGAATA  
CATGTGGATCGGACATGGCCGACAAAGGAGAGTTCAATACAAGGCTTTTCCATAACCAATCCA  
TAAATATCCTATGTCCACGCTTGGGTGGAATCTCTCCACCAAACATCAAGCCAGGATCAGGT  
CCTCATCTACCCATGCCCCACTCCATGGACTCCGACACATCCCCACTGCAGGAGATTGCCATA  
TACGCCACCATAACAGTGCTCCTCAACCGCTAACATGTTGGACACCAAATTCTATATACTTAT  
ATAGTTCATCTCCACTAAGTGTAAGTTAATTACATTTCTCTCTCTCATTAAGCCACATCAC  
CTCAATTATTTTATAGCCTTTAGATGATAGATCTATGGTCCAAATTGTCTTTTCTTTCTTCTCT  
CTTAAAAACATGCAATCTTAAATACTTTTAGGCTCAAAATTGTATCAAATTGTTTTAGTTTTG  
TACATATTATGCAACTTAATTTTTCGCCGCAACGCGGAGGGGTATTTTCATCTAGTATTATTTA  
AGAGCTATACACACTGCTATAGGGGAAAAAAAGATAGGTTTGGCCCCCTGGTCAGTCTGT  
GCACGGCTATATGTTGAAGGGAAAAAGCCAGTACGTTTTGTAGGTTGTTTTTTTTTAGAATT  
GCTAAAAAGTTGTGGCATGTTTTTTAGGTAAAAGCCTTTAAATATAAGTTACATTGTAAGTAC  
AGTGTAATTCCGCTGTAAGTATATTTGTAATCTCTATATAAGTTAGATATAAAATTACATATAT  
ATTATTTTAATACTTATTTATAAGTTAGTATATTATAGTTATAATGGAATTAATTATAATTAT  
AGTATAGTTAGATTTGAAAGTTTTTCCTTTAAGAAATTTTCGCAACAGTTTATTAGATATAGTC  
CCTAAACGAAAATGTCAGGTGGATGCATGATTCAGTGTGACGCTCGGGCGGATCACGGCTGCG  
TCACGAAAATTCCCCCATGCAACCCGCGTCCGGCCGTCCTTCGTGCCAACAGGCAACAGCGC  
GGCGCCGGCGAACGTCACGCCCAAGATTATATTCCCCCTCTCGCGCTCGCGCGCGCCGCGACG  
TCGTCCGAGCCAACATTATTTTTCTGTTTCTGTCAACGTCGCCGTTGATCTCAAGCGAGATT  
TGAGGTTTGGCCACGACGACGCTGCCTATAAATACCAGGTGGTGGTCAACGCCCGGCGGCGT  
CGATCGATCCGTCGCGAGTCGTCTCCGGCGAGAAATCGGCTGCGCCCCGTCTCTCTCTCTCG  
AACGCTTCCATG

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Fig. 22. Predicted protein sequences

taRAFTIN1a (389 residues)

MARFLVALLATTILVAVQAGGQLGHAAPATAEVFWRAVLPHSPLPDAVLRLLLKQPAAGVELLTEATSFVR  
DAEDRPPFDYRDYSRSPDDEPSKSTGAASGARDFDYDDYSGGDKLRGAASGARDFDYDDYSGADKLRG  
ATDEYKAPSSSLAGNGASMARGGKAETTTVFFHEEAVRVGKRLPFRFPATPAALGFLPRQVADSVFPT  
TAALPGVLATFGVASDSATVASMEATLRACESPTIAGESKFCATSLEALVERAMEVLGTRDIRPVTSTL  
PRAGAPLQTYTVRSVRPVEGGPVFVACHDEAYPYTVYRCHTTGPSRAYMVDMEGARGGDAVTIATVCHT  
DTSLWNPEHVSFKLLGTPGGTPVCHLMPYGHIIWAKNVNRSPA

taRAFTIN1b (362 residues)

MARFLVALLAATLVAVQAGGQLGHAAPATGEVFWRAVLPHSPLPDAVLRLLLKQPAAESTSFVRDPEDRP  
PFDYRDYSRSSSDDEPSKSTVAASGAGGFDYDNYSGADERRGATDEYKAPSSSLAGSGAYMARGGKAET  
TTVFFHEEAVRVGRRLPFHFPPATPAALGFLPRQVADSVFPTTAALPGILATFGIASDSTTVPSMEATL  
RACESPTIAGESKFCATSLEALVERAMGVLGTRDIRPVTSTLPRAGAPLQTYTVAVVQPVVEGGPVFVAC  
HDEAYPYTVYRCHTTGPSRAYTVDMEGARGADAVTIAAVCHTDTSLWNPEHVSFKLLGTPGGTPVCHL  
MPYGHIIWAKNVKRSPA

taRAFTIN1d (partial sequence, 82 residues)

MARFLVALLAATLVAVQAGGQLGHAAPATAEVFWRAVLPHSPLPDAVLRLLLKQPAAGVELHTEATSFVR  
DPEDRPPFDYRDY

osRAFTIN1 (412 residues)

MARFLLLLVAVAAAAAVLSLGDAAAPSTAEVFWRAVLPELPLDAFLRLLRPDTSFVVGKAEAAGGAART  
GFPFDYTDYRGSDSPTTASGLDLAGDFGEPAPFGYDYSAQGEAGGGGAAAAAGEQVLAVDAGFNVDKYV  
GARKLRGGSSTAGGENDDEPFGYDYKAPSSSGSGTAASTTARGVGTGATTTVFFHEEAVRVGERLPFYFP  
AATTSALGFLPRRVADSIPTAAALPAVLALFGVAPDTAEAAGMRETLRTCEWPTLAGESKFCATSLEA  
LVEGAMAALGTRDIAALASTLPRGGAPLQAYAVRAVLPEVAGGFVACHDQAYPYTVYRCHTTGPARAYM  
VMEGDGGGDGGEAVTVATVCHTNTSRWNPEHVSFKLLGTPGGSPVCHLMPYGHIVWAKNVKSSTA



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